

User Manual

PRODUCT NAME : Wi-Fi Dongle

MODEL NAME : ETGFFRBU01

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REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 2 / 16

Table of Contents

No	Description	Page
1	Features	3
2	Picture of Product	3
3	Block Diagram	4
4	Absolute Maximum Ratings	4
5	Operating Conditions	5
6	Standard Test Conditions	5
7	Pin Description	6
8	Outline Drawing	7
9	Notice of Precautions	8
10	SET installation environment	16

1. Features

ETGGFFRBU01 is the USB Dongle for Wi-Fi 5 wireless LAN.

ETGGFFRBU01 is based on Realtek RTL8822CU solution.

- IEEE 802.11 a/b/g/n/ac 2T2R Dual Band MIMO
- Size : 97.4mm x 27mm x 8.0 mm (with cap)
- Two stream spatial multiplexing 802.11n / 802.11ac
- Use on-chip OTP (One-Time Programmable)
- Host Interface : USB2.0
- Security : WAPI, WPA, WPA2
- WPS function by button

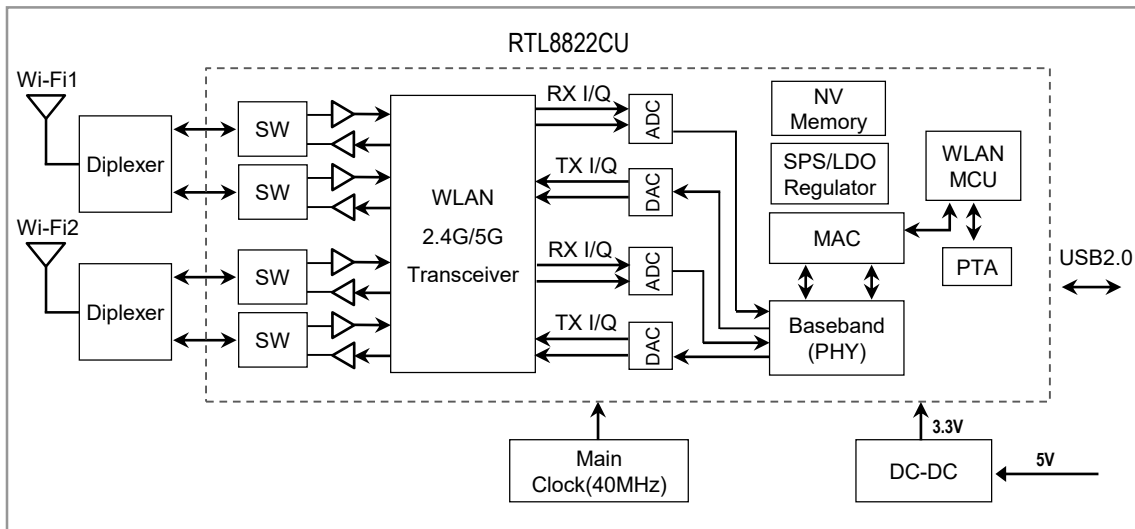
2. Picture of Product



WPS Button



3. Block Diagram



4. Absolute Maximum Ratings

Parameter	Min	Max	Unit
Storage Temperature	-20	+60	°C
Storage Humidity (40°C)	-	90	%

Caution : The specifications above the Table define levels at which permanent damage to the device can occur. Function operation is not guaranteed under these conditions. Operating at absolute maximum conditions for extend periods can adversely affect the long-term reliability of the device.

- Other conditions

- 1) Do not use or store modules in the corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are contained.

Also, avoid exposure to moisture.

- 2) Store the modules where the temperature and relative humidity do not exceed 5 to 40°C and 20 to 60%.

- 3) Assemble the modules within 6 months.

Check the soldering ability in case of 6 months over.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 5 / 16

5. Operating Test Conditions

Parameter	Min	Typ	Max	Unit
Ambient Temperature	-10	-	60	°C
Ambient Humidity (40°C)	-	-	85	%
Supply Voltage	4.75	5.0	5.25	Vdc

6. Standard Test Conditions

The Test for electrical specification shall be performed under the following condition
Otherwise this following conditions, not guaranteed this performance.

6-1. Ambient condition

Temperature	25 ± 5°C
Humidity	65 ± 5%

6-2. Power supply voltages

Input power	Supply Voltage
VDD_5.0V	4.75 ~ 5.25V

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

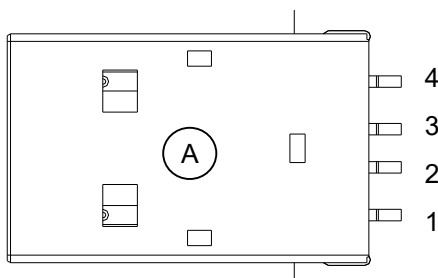
MODEL NAME : ETGFFRBU01


PAGE : 6 / 16

7. Pin Description

Pin No.	Pin Name	I/O	Pin Description
1	VDD	I	VDD 5.0V, $\pm 5\%$
2	D-	I/O	USB Communication signal USB_DN
3	D+	I/O	USB Communication signal USB_DP
4	GND	-	GND

< Top view >

**Note.**

- 1) Recommend a Module install sequence for prevent operation failure
 - GND
 - Supply 5.0V power
 - Connect to DP, DN
- 2) Connector: USB A type Plug 

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFRRBU01

PAGE : 7 / 16

8. Outline Drawing

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All parts which supply to LG Innotek must not contain prohibited substances including RoHS Hazardous substances and for more details refer to LG Innotek's "Manual for management of hazardous substances in Product"

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2 | 3 | 4 | 5 | 6

DIMENSIONAL TOLERANCE		C	H	A	N	E	S
~ up to 6	±0.1						
over 6 up to 30	±0.1						
over 30 up to 120	±0.2						
over 120 up to 400	±0.5						
over 400 up to 1000	±0.8						
over 1000 up to 2000	±1.2						
UNLESS OTHERWISE SPECIFIED							

LGIT_STD A4_HOR	REV. NO. 2	DATE (YY MM DD)	SIGNATURE	CHANGE CONTENTS	PART NO.	DESCRIPTION	MATERIAL	TITLE	FINISH	NOTE
					RELATED P/N	SCALE 1 : 1	DESIGN 21.04.22	Outline Drawing		
					THIRD ANGLE PROJECT	UNIT mm	CHECKED 21.04.22			
					LG Innotek		Approved 21.04.22	MODEL ETGFRRBU01		
							Checked by: Seek-dong Choi.			LG Innotek Co., Ltd.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 8 / 16

9. Notice of precautions

Manufacture: LG Innotek

Product Name: Wi-Fi Dongle

Model: ETGFFRBU01

Operating Voltage: USB 5V (4.75 ~ 5.25V)

Operating Temperature: -10°C ~ 60°C

Postal address: E1/E3, 30, Magokjungang 10-ro, Gangseo-gu, Seoul, 07796, Korea

Communications Regulations

The following is a list of communications regulations apply to the ETGFFRBU01.

Manufacturer name: LG Innotek

Wi-Fi Dongle is operated only by connected with customer SET. So end user doesn't contact with Wi-Fi dongle.

**United States Compliance**

FCC

FCC Part 15.19 statement

FCC ID: YZP-ETGFFRBU01

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Part 15.105 statement (Class B)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 9 / 16

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15.21 statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device must not be co-located or operating in conjunction with any other antenna or transmitter

RF Exposure

The antenna (or antennas) must be installed so as to maintain at all times a distance minimum of at least 20 cm between the radiation source (antenna) and any individual. This device may not be installed or used in conjunction with any other antenna or transmitter.

Responsible Party – U.S. Contact Information

LG Innotek USA Inc.

2540 N 1stST STE 400 SAN JOSE, CA 95131-1016, USA

TEL. 1-408-890-0844 / cku@lginnotek.com

Frequency	Antenna type & Peak gain
2412 ~ 2472 MHz (WLAN 2.4 GHz)	ANT 1. Antenna type : PCB Printed antenna (Peak Gain : 1.5 dBi) ANT 2. Antenna type : PCB Printed antenna (Peak Gain : 0.82 dBi)
5180 ~ 5825 MHz (WLAN 5 GHz)	ANT 1. Antenna type : PCB Printed antenna : 1.46 dBi(UNII 1) / 1.48 dBi(UNII 2A)/ : 1.47 dBi(UNII 2C)/ 1.50 dBi(UNII 3) ANT 2. Antenna type : PCB Printed antenna : 1.47 dBi(UNII 1) / 1.49 dBi(UNII 2A)/ : 1.50 dBi(UNII 2C)/ 1.44 dBi(UNII 3)

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 10 / 16

Canada Compliance

ISED

IC: 7414C-ETGFFRBU01

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s).

Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de license contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de license. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure

The antenna (or antennas) must be installed so as to maintain at all times a distance minimum of at least 20 cm between the radiation source (antenna) and any individual. This device may not be installed or used in conjunction with any other antenna or transmitter.

l'exposition aux RF

L'antenne (ou les antennes) doit être installée de façon à maintenir à tout instant une distance minimum de au moins 20 cm entre la source de radiation (l'antenne) et toute personne physique.

Caution

Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

Les changements ou modifications de cet appareil non expressément approuvé par le fabricant peuvent annuler votre droit à utiliser cet équipement.

"The 5150-5250MHz band is restricted indoor use only."

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 11 / 16

Canada Compliance

ISED

IC: 7414C-ETGFFRBU01

Antennas list

Frequency	Antenna type & Peak gain
2412 ~ 2472 MHz (WLAN 2.4 GHz)	ANT 1. Antenna type : PCB Printed antenna (Peak Gain : 1.5 dBi) ANT 2. Antenna type : PCB Printed antenna (Peak Gain : 0.82 dBi)
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REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 12 / 16

**European Union Compliance**

CE

Conformité Européenne

(European Conformity)

Hereby, LG Innotek declares that this Radio Equipment Model number ETGFFRBU01 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: <http://connect.lginnotek.com/products/?category=wi-fi>

This product operates in the 2.4-2.4835 GHz / 5.15-5.85 GHz band.

5150-5350 MHz is Indoor user only.

Manufacturer Name: LG Innotek

Manufacturer Address: E1/E3, 30, Magokjungang 10-ro, Gangseo-gu, Seoul, 07796, Korea

LG Innotek Europe Branch

The postal address: Am Limespark 2 (Innovapark) 65843 Sulzbach am Taunus, Germany

Frequency	Max. Power (EIRP, Tolerance)
2412 - 2472 MHz	19.35 dBm
5150 - 5250 MHz 5250 - 5350 MHz 5470 - 5725 MHz	21.79 dBm
5725 - 5850 MHz	13.87 dBm

German

LG Innotek erklärt, dass dieses Funkgerät mit der Modellnummer ETGFFRBU01 der Richtlinie 2014/53/EU entspricht.

Der vollständige Text der EU-Konformitätserklärung ist unter folgender Internetadresse abrufbar: <http://connect.lginnotek.com/products/?category=wi-fi>

Dieses Produkt arbeitet im 2,4-2,4835 GHz / 5,15-5,85 GHz-Band.

5150-5350 MHz ist nur für Benutzer in Innenräumen geeignet.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 13 / 16

French

LG Innotek déclare que ce numéro de modèle d'équipement radio ETGFFRBU01 est conforme à la directive 2014/53/UE.

Le texte intégral de la déclaration de conformité UE est disponible à l'adresse Internet suivante : <http://connect.lginnotek.com/products/?category=wi-fi>

Ce produit fonctionne dans la bande 2,4-2,4835 GHz / 5,15-5,85 GHz. 5150-5350 MHz est un utilisateur intérieur uniquement.

Czech

Společnost LG Innotek prohlašuje, že toto číslo modelu rádiového zařízení ETGFFRBU01 je ve shodě se směrnicí 2014/53 / EU.

Plné znění EU prohlášení o shodě je k dispozici na následující internetové adrese: <http://connect.lginnotek.com/products/?category=wi-fi>

Tento produkt pracuje v pásmu 2,4-2,4835 GHz / 5,15-5,85 GHz. 5150-5350 MHz je určen pouze pro vnitřní použití.

Danish

LG Innotek erklærer, at dette radioudstørs modelnummer ETGFFRBU01 er i overensstemmelse med direktiv 2014/53 / EU.

Den fulde tekst til EU-erklæringen om overensstemmelse findes på følgende internetadresse: <http://connect.lginnotek.com/products/?category=wi-fi>

Dette produkt fungerer i 2,4-2,4835 GHz / 5,15-5,85 GHz-båndet. 5150-5350 MHz er kun indendørs bruger.

Bulgarian

LG Innotek декларира, че този номер на модела за радиооборудване ETGFFRBU01 е в съответствие с Директива 2014/53 / ЕС.

Пълният текст на ЕС декларацията за съответствие е достъпен на следния интернет адрес: <http://connect.lginnotek.com/products/?category=wi-fi>

Този продукт работи в обхвата 2,4-2,4835 GHz / 5,15-5,85 GHz. 5150-5350 MHz е само за вътрешни потребители.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : ETGFFRBU01

PAGE : 14 / 16

Greek

Η LG Innotek δηλώνει ότι αυτός ο αριθμός μοντέλου ραδιοεξοπλισμού ETGFFRBU01 συμμορφώνεται με την οδηγία 2014/53 / ΕΕ.

Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη διεύθυνση Διαδικτύου: <http://connect.lginnotek.com/products/?category=wi-fi>

Αυτό το προϊόν λειτουργεί στη ζώνη 2,4-2,4835 GHz / 5,15-5,85 GHz.

Τα 5150-5350 MHz είναι μόνο εσωτερικοί χρήστες

Spanish

LG Innotek declara que este equipo de radio número de modelo

ETGFFRBU01 cumple con la Directiva 2014/53 / UE. El texto completo de la declaración de conformidad de la UE está disponible en la siguiente dirección de

Internet: <http://connect.lginnotek.com/products/?category=wi-fi>

Este producto funciona en la banda de 2,4-2,4835 GHz / 5,15-5,85 GHz.

5150-5350 MHz es solo para usuarios en interiores.

Estonian

LG Innotek kinnitab, et see raadioseadme mudelinumber

ETGFFRBU01 on kooskõlas direktiiviga 2014/53 / EL.

ELi vastavusdeklaratsiooni täistekst on saadaval järgmisel Interneti-aadressil:

<http://connect.lginnotek.com/products/?category=wi-fi>

See toode töötab sagedusalas 2,4–2,4835 GHz / 5,15–5,85 GHz.

5150–5350 MHz on ainult sisekasutaja.

Finnish

LG Innotek vakuuttaa, että tämä radiolaitteen mallinumero

ETGFFRBU01 on direktiivin 2014/53 / EU mukainen.

EU-vaatimustenmukaisuusvakuutuksen koko teksti on saatavana seuraavasta

Internet-osoitteesta: <http://connect.lginnotek.com/products/?category=wi-fi>

Tämä tuote toimii 2,4-2,4835 GHz / 5,15-5,85 GHz: n kaistalla.

5150–5350 MHz on vain sisäkäyttäjää.

REG. DATE : 2021. 07. 05

Specification

REV. NO : 1.0

REV. DATE : 2021. 07. 05

MODEL NAME : **ETGFFRBU01**

PAGE : 15 / 16

UK (UKCA)**Simplified UK Declaration of Conformity**

Hereby, LG Innotek , declares that the radio equipment Model number ETGFFRBU01 is in compliance with the Radio Equipment Regulations 2017.

The full text of the UK declaration of conformity is available at the following internet address: <http://connect.lginnotek.com/products/?category=wi-fi>

This product operates in the 2.4-2.4835 GHz / 5.15-5.85 GHz band.

5150-5350 MHz is Indoor user only.

Manufacturer Name: LG Innotek**Manufacturer Address: E1/E3, 30, Magokjungang 10-ro, Gangseo-gu, Seoul, 07796, Korea****LG Innotek UK importer**

The postal address (in UK):

Hanwha Q CELLS GmbH

8 Experian Way, NG2 Business Park, Nottingham Commerce Centre, NG2 1EP
Nottingham

10. SET Installation environment

Wi-Fi dongle will be used for internet communication through AP Connection.

SET is installed in non-residential area in the home, a separation distance of 20cm or more is maintained from the end user.

※ Non-residential area : Boiler room, warehouse, garage etc.

